

AMENDMENT TO THE DRAWINGS

Please amend Figure 1 to change reference number “30” designating the power cord to reference number “31.” The replacement drawing for Figure 1, as amended, accompanies this amendment.

REMARKS

The Specification has been amended on pages 6; 8; and 12 to correct discrepancies between it and the drawings. The Specification on page 17 has been amended to remove reference to the collection of air bubbles in the higher gravity position of the well by "gravity." Figure 1 has been amended to change reference number "30" designating the power cord to reference number "31." The replacement drawing for Figure 1, as amended, accompanies this amendment.

It is believed these amendments overcome the rejections based upon 35 U.S.C. § 112.

Claims 1; 2; 15; and 16 have been amended. Claims 11 to 14 are canceled.

Claims 1 to 10 and 15 to 23 remain in the application. Of these, claim 1 is the sole independent apparatus claim. Method claims 15 and 16 have been made dependent upon claim 1 and 2, respectively.

It is believed that the amendments to claims 15 and 16 overcome the claim objections to these claims.

It is also believed that the amendments to claims 1 and 2 overcome the rejections under 35 U.S.C. § 103 based upon Talish et al (US 6,432,070) in view of Peterson et al (US 6,126,619) and Meyers (US 5,531,119).

Talish does not teach or suggest a stand-off region, as defined in amended claim 1 and its dependent claim 2, that is spaced outward from and encircles the entire periphery of a transducer face for a set distance below the gravity plane of the transducer face, to prevent direct contact between the transducer face and the skin region through which ultrasound energy is applied. Talish also does not teach or suggest a flexible material, as further defined in amended claim 1 and its dependent claim 2, that overlays the stand-off region to form a bladder chamber between the flexible material and the transducer face. Furthermore, Talish does not teach or suggest a well region, as defined in amended claim 1 and its dependent claim 2, that extends outward about the entire periphery of the transducer face between the transducer face and the stand-off at a position above the gravity plane, to collect away from the transducer face, and without discharge from the bladder chamber, air bubbles forming in the acoustic coupling media liquid, to minimize localized skin surface heating effect. There is absolutely nothing in Talish that teaches, suggest, or contemplates the collection of air bubbles, much less providing a specific structure, as defined in the amended claims, that collects air bubble away from the transducer face and without discharge from the bladder chamber, for that purpose.

Peterson does not teach or suggest a stand-off region that is spaced outward from and encircles the entire periphery of a transducer face for a set distance below the gravity plane of the transducer face, to prevent direct contact between the transducer face and the skin region through which ultrasound energy is applied. Peterson also does not teach or suggest a well region that extends outward about the entire periphery of the transducer face between the transducer face and the stand-off at a position above the gravity plane, to collect away from the transducer face, and without discharge from the bladder chamber, air bubbles forming in the acoustic coupling media liquid. Peterson directs air bubbles directly into transducer face for discharge outside the bladder chamber.

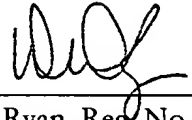
Meyers does not teach or suggest a stand-off region that is overlaid by a flexible material that defines an acoustic contact area contacting and conforming to the skin region. Meyers also does not teach or suggest a well region that extends outward about the entire periphery of the transducer face between the transducer face and the stand-off at a position above the gravity plane, to collect away from the transducer face, and without discharge from the bladder chamber. Meyer directs air bubbles for discharge outside the bladder chamber.

There is nothing in the combination of the three documents that fairly leads to the combination of technical features defined in the amended claims. The principal reference Talish does not contemplate air bubble removal in any respect. Neither Peterson nor Meyers teach or suggest air bubble removal that is both away from the transducer face and does not require discharge of bubble from the bladder chamber. The well region defined in the amended claims makes possible air bubble collection away from the transducer face in a small, ergonomic geometry, without requiring the added complexity and components for discharging air from the bladder chamber, as the vent paths through the transducer face in Peterson and the convoluted interior funnel paths in Meyers.

Applicant notes the provisional double patenting rejection based upon claims pending in Application Serial No. 09/938,307. Applicant will address the double patenting rejection upon the indication of allowance of claims, but for the double patenting issue, either in this application or in the co-pending '307 Application.

Claims 1 to 10 and 15 to 23 are believed to be in condition for allowance.

Respectfully Submitted,

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Enclosures: Amendment Transmittal
Replacement Drawing Sheet (1/14)
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